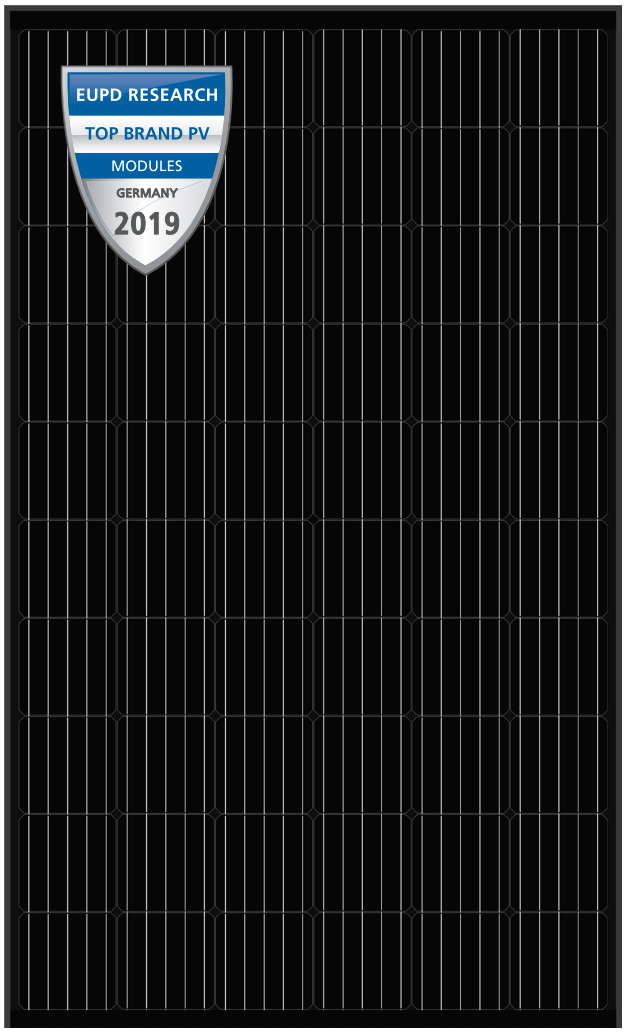
Solar Module
Manufacturer
Since 2004

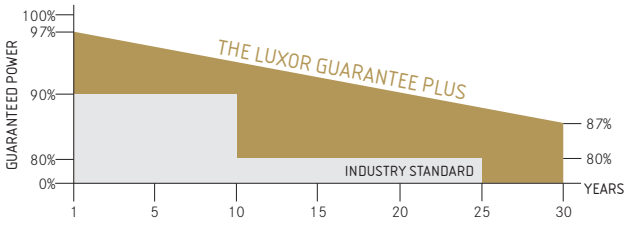
LUXOR
the sunshine people




+ DOUBLE GLASS: HIGHER MECHANICAL STABILITY AND FIRE SAFETY
+ HIGH CLASS APPEARANCE: EASY INTEGRATION IN BUILDINGS
+ APPLICATION: WHEREVER DURABILITY AND ROBUSTNESS ARE REQUIRED
+ ECO: ESPECIALLY ECONOMIC AND RELIABLE

30 YEARS
product guarantee[1]

30 YEARS
linear performance guarantee[1]




# ECO LINE GLASS-GLASS FULL BLACK
# M60/ 290 - 310 W

## MONOCRYSTALLINE MODULE FAMILY

Longlife tested
- Selection of components
- Back glass

Power proofed
- Performance surplus of 0 Wp to 6.49 Wp
- Higher heat dispensing

Safety provided
- 100% PID free cells
- German warrantor

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# ECO LINE GLASS-GLASS FULL BLACK M60/290 - 310 W

Monocrystalline module family | Module type LX - XXXM/156-60+ GG | XXX = Rated power Pmpp

**Electrical data at STC**

| | | | | | |
|---|---|---|---|---|---|
| Rated power Pmpp [Wp] | 290.00 | 295.00 | 300.00 | 305.00 | 310.00 |
| Pmpp range to | 296.49 | 301.49 | 306.49 | 311,49 | 316.49 |
| Rated current Impp [A] | 9.26 | 9.32 | 9.38 | 9,44 | 9.50 |
| Rated voltage Vmpp [V] | 31.37 | 31.68 | 32.02 | 32,33 | 32.68 |
| Short-circuit current Isc [A] | 9.78 | 9.83 | 9.88 | 9,93 | 9.98 |
| Open-circuit voltage Uoc [V] | 38.50 | 38.70 | 38.89 | 39,08 | 39.28 |
| Efficiency at STC up to | 17.77% | 18.07% | 18.37% | 18.67% | 18.97% |
| Efficiency at 200 W/m² | 17.25% | 17.51% | 17.78% | 18,06% | 18.34% |

**Electrical data at NOCT**

| | | | | | |
|---|---|---|---|---|---|
| Power at Pmpp [Wp] | 214.58 | 217.95 | 221.68 | 225.18 | 228.89 |
| Rated current Impp [A] | 7.38 | 7.43 | 7.48 | 7.53 | 7.58 |
| Rated voltage Vmpp [V] | 29.06 | 29.33 | 29.64 | 29.91 | 30.21 |
| Short-circuit current Isc [A] | 7.80 | 7.84 | 7.88 | 7.92 | 7.96 |
| Open-circuit voltage Uoc [V] | 35.47 | 35.63 | 35.76 V | 35.92 | 36.07 |

Specification as per STC (Standard test conditions): irradiance 1000 W/m² | module temperature 25°C | Air Mass = 1.5
NOCT (nominal operating cell temperature): irradiance 800 W/m² | wind speed 1 m/sec | ambient temperature 20°C | cell operating temperature 45 +/-2°C | Air Mass = 1.5

**Limiting values**

| | |
|---|---|
| Max. system voltage [V] | 1000 V |
| Max. return current [I] | 15 A |
| Operating Temperature | -40 to 85°C |
| Safety class | II |
| Max. tested pressure load [Pa][2] | 5400 |
| Max. tested tensile load [Pa][2] | 2400 |

**Temperature coefficient**

| | |
|---|---|
| Temperature coefficient [V] \| [I] \| [P] | -0.30% /°C \| 0.06% /°C \| -0.40% /°C |

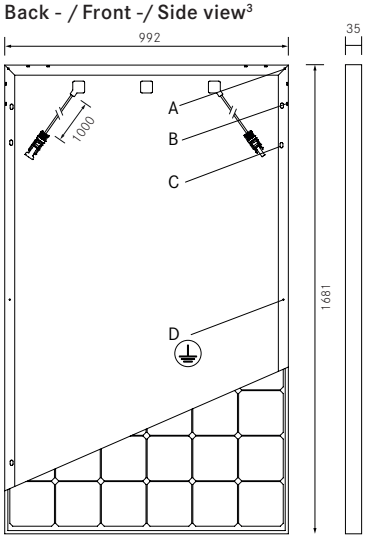
**Specifications**

| | |
|---|---|
| Number of cells (matrix) | 60 (6 x 10), three strings in a row I 156 mm x 156 mm |
| Module dimensions (LxWxH)[3] \| Weight | 1681 mm x 992 mm x 35 mm \| 25 kg |
| Front-side glass | 2.5 mm hardened solar glass with low iron content |
| Back-side glass | 2.5 mm hardened solar glass |
| Frame | stable, anodised aluminium frame |
| Junction Box | At least IP65 |
| Cable | 4 mm² solar cable, cable length 1.0 m |
| Diodes | 3 Schottky Diodes |
| Plug-in connection | MC4 or equivalent (IP67) |
| Hail test (max. hailstorm) | Ø 45 mm \| impact velocity 23 m/s ≙ 83 km/h |

The specifications and average values can vary slightly. Relevant is the corresponding data of the individual measurement. Specifications are subject to change without notice. Measurement tolerance depending on equipment: rated power +/- 3%, other values +/- 10%. All information given in this data sheet correspondes to DIN EN 50380. A potential light-induced degradation of the power after commissioning is not considered here. Further information in the installation manuals.

1 The specific warranty conditions are given under www.luxor-solar.com/download.htm
2 Horizontal mounted
3 Tolerance L/W = +/- 3 mm. H +/-2mm, the dimensions given in the order confirmation will be decisive
4 Location and dimensions of holes on request

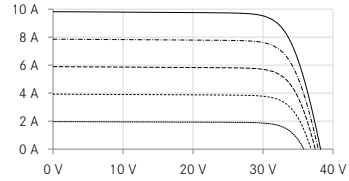
**Back - / Front -/ Side view[3]**



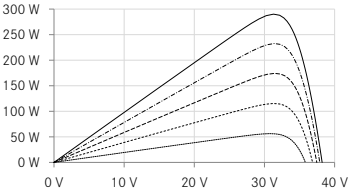

**Drilled holes[4]**
A: 4 x drainage
B: 16 x ventilation
C: 8 x mounting
D: 2 x earthing

**Electrical characteristics**

UI-diagram e.g. LX-290M/156-60+ GG




UP-diagram e.g. LX-290M/156-60+ GG




200W/m²
400W/m²
600W/m²
800W/m²
1000W/m²

Luxor, your specialised company

IEC 61215
IEC 61730

Guidelines:
93/68/EEC
2014/35/EU, (LVD)
2014/30/EU, (EMC)

The validity of the certificates/listings for a specific country has to be examined under:
www.luxor-solar.com/download.htm